

WHAT IS CLAIMED IS:

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1. A document management device having a document storage unit for storing a document, comprising:

10 a usage permission information request reception unit configured to receive a usage permission information request from a usage permission information requesting client, said usage permission information permitting usage of the document storage unit;

15 a usage permission information generation unit configured to generate the usage permission information in response to the received usage permission information request; and

20 a usage permission information transmission unit configured to transmit the usage permission information to the usage permission information requesting client.

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2. The document management device as  
claimed in claim 1, wherein

the usage permission information generation  
unit generates the usage permission information and  
5 identification information of the usage permission  
information, and holds the usage permission information.

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3. The document management device as  
claimed in claim 2, wherein

the usage permission information  
transmission unit transmits the identification  
15 information to the usage permission information  
requesting client as the usage permission information.

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4. The document management device as  
claimed in claim 2 or 3, wherein

the usage permission information includes  
identification information of the document storage unit  
25 and authority information of the usage permission

information.

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5. The document management device as  
claimed in claim 2 or 3, wherein

the usage permission information includes  
identification information of the document storage unit  
10 and effective period information of the usage  
permission information.

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6. The document management device as  
claimed in claim 2 or 3, wherein

the usage permission information includes  
identification information of the document storage unit  
20 and information of a maximum number of connections with  
the document management device.

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7. The document management device as  
claimed in claim 2 or 3, wherein

the usage permission information includes  
identification information of the document storage unit  
5 and information of a maximum number of operations of  
document storage in the document storage unit.

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8. The document management device as  
claimed in claim 2 or 3, wherein

the usage permission information includes  
identification information of the document storage unit  
15 and information of a storage capacity in the document  
storage unit.

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9. The document management device as  
claimed in claim 2 or 3, wherein

the usage permission information includes a  
plurality of items of identification information of the  
25 document storage units.

5                   10. The document management device as  
claimed in one of claims 1 to 9, further comprising:

                  a usage request reception unit configured to  
receive a usage request from a usage requesting client  
for using the document storage unit; and

10                   a usage unit configured to use the document  
storage unit according to the usage permission  
information.

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                  11. The document management device as  
claimed in claim 10, wherein

                  the usage request includes information on  
20 the document and information on the document storage  
unit.

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12. The document management device as  
claimed in claim 10 or 11, wherein

the usage unit stores the document in the  
document storage unit according to the usage permission  
5 information.

10 13. The document management device as  
claimed in claim 12, further comprising:

a document identification information  
appending unit configured to append document  
identification information for identifying the stored  
15 document to the usage permission information, said  
document identification information being appended as  
an editable data.

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14. The document management device as  
claimed in claim 12, further comprising:

a document identification information  
25 transmission unit configured to transmit document

identification information for identifying the stored document to the usage requesting client.

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15. The document management device as claimed in claim 12, further comprising:

a document usage permission information  
10 transmission unit configured to transmit information for permitting usage of the stored document to the usage requesting client.

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16. The document management device as claimed in one of claims 10 to 15, wherein

the usage unit includes a determination unit  
20 that determines whether the document storage unit requested by the usage request is at a lower level than the document storage unit in the usage permission information generation unit.

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17. The document management device as claimed in one of claims 1 to 16, further comprising:

5           a document list information request reception unit configured to receive a document list information request from a document list information requesting client for acquiring document list information of at least one document stored in the  
10 document storage unit; and  
          a document list information transmission unit configured to transmit the document list information to the document list information requesting client in response to the received document list  
15 information request.

20           18. The document management device as claimed in claims 1 to 17, further comprising:

          a document content information request reception unit configured to receive a document content information request from a document content information  
25 requesting client for acquiring information of contents



of the document stored in the document storage unit;  
and

a document content information transmission  
unit configured to transmit the document content  
5 information to the document content information  
requesting client in response to the received document  
content information request.

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19. The document management device as  
claimed in claims 1 to 18, further comprising:

a connection permission information request  
15 reception unit configured to receive a connection  
permission information request from a connection  
permission information requesting client for acquiring  
connection permission information that includes the  
usage permission information and permits connection  
20 with the document management device;

a connection permission information  
generation unit configured to generate the connection  
permission information in response to the received  
connection permission information request; and  
25 a connection permission information

transmission unit configured to transmit the connection permission information to the connection permission information requesting client.

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20. The document management device as claimed in claim 19, further comprising:

10           an identification information request reception unit configured to receive an identification information request, made by the connection permission information requesting client, for acquiring identification information of the document storage unit,  
15   said identification information of the document storage unit including the connection permission information and the usage permission information; and

          an identification information transmission unit configured to transmit the identification  
20   information to the connection permission information requesting client that requests the identification information in response to the received identification information request.

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21. A method of a document management  
device having a document storage unit for storing a  
5 document, comprising the steps of:

receiving a usage permission information  
request from a usage permission information requesting  
client for acquiring usage permission information that  
permits usage of the document storage unit;  
10 generating the usage permission information  
in response to the received usage permission  
information request; and  
transmitting the usage permission  
information to the usage permission information  
15 requesting client.

20 22. The method as claimed in claim 21,  
further comprising the steps of:

receiving a usage request from a usage  
requesting client for using the document storage unit;  
and  
25 using the document storage unit according to

the usage permission information.